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Patent claims

1. Method for updating information in an AAA server system, whereby
- an updating message (UpdtRAD1, UpdtRAD2, UpdtRAD3) is sent
regularly by a first AAA server (RAD1, RAD2, RAD3) of the AAA server
system (RADSS) to all the other AAA servers (RAD1, RAD2, RAD3) of
the AAA server system (RADSS),
- this updating message (UpdtRAD1, UpdtRAD2, UpdtRAD3) incorporates
information about changes to the status of the subsets (A1, A2, A3)
of the address pool (A) which are assigned to the first AAA server
(RAD1, RAD2, RAD3), which have taken place since the previous
updating message (UpdtRAD1, UpdtRAD2, UpdtRAD3)
- before the updating message (UpdtRAD1, UpdtRAD2, UpdtRAD3) is
sent, an estimate is made in the first AAA server (RAD1, RAD2, RAD3)
of the logical addresses which will be issued in the time period
between the updating message which is about to be sent (UpdtRAD1,
UpdtRAD2, UpdtRAD3) and the next-following updating message
(UpdtRAD1, UpdtRAD2, UpdtRAD3),
- subsets (A1, A2, A3) of the address pool (A), which are assigned
to the first AAA server (RAD1, RAD2, RAD3), are selected from which
to take the logical addresses which, according to the estimate, will
be required in the time period, and
- the updating message (UpdtRAD1, UpdtRAD2, UpdtRAD3) also contains
information about which of the subsets (A1, A2, A3) of the address
pool (A), which are assigned to the first AAA server (RAD1, RAD2,
RAD3), have been selected from which to take the logical addresses
which, according to the estimate, will be required in the time
period.

2. Method in accordance with claim 1,
characterized in that
- the estimate is made by forming the product of the maximum rate at
which the AAA server (RAD1, RAD2, RAD3) can process requests for the
issue of a logical address and the time period between the

updating message (UpdtRAD1, UpdtRAD2, UpdtRAD3) which is about to be sent and the next-following updating message (UpdtRAD1, UpdtRAD2, UpdtRAD3).

3. Method in accordance with one of the claims 1 or 2, characterized in that
- the first AAA server (RAD1, RAD2, RAD3) checks whether the subsets (A1, A2, A3) of the address pool (A) which will be required according to the estimate are available, and
- if the result of the check by the first AAA server (RAD1, RAD2, RAD3) is negative, the assignment of a subset from another AAA server (RAD1, RAD2, RAD3) to the first AAA server (RAD1, RAD2, RAD3) is effected.

4. Method in accordance with one of the claims 1 or 2, characterized in that
in the event of the failure of the first AAA server (RAD1, RAD2, RAD3), the subsets (A1, A2, A3) of the address pool (A) which are assigned to the first AAA server (RAD1, RAD2, RAD3) are assigned to a second AAA server (RAD1, RAD2, RAD3).

5. Method in accordance with claim 4, characterized in that
the second AAA server (RAD1, RAD2, RAD3) is selected in accordance with the stipulations of a priority list of AAA servers (RAD1, RAD2, RAD3).

6. Method in accordance with claim 1 and one of the claims 4 or 5, characterized in that
if a first AAA server (RAD1, RAD2, RAD3) fails the subsets (A1, A2, A3) of the address pool (A), which according to the last updating message received by the second AAA server (RAD1, RAD2, RAD3) from the first AAA server (RAD1, RAD2, RAD3) have been selected from which to take the logical addresses which according to the estimate will be required in the time period, will not be

used for the reissuing of logical addresses (IP1, ..., IPN) for a
period of time.

7. Method in accordance with claim 6,
characterized in that
the time period will be determined in accordance with the
stipulations for the maximum permissible connection time.

8. Method in accordance with one of the preceding claims,
characterized in that
- a second AAA server (RAD1, RAD2, RAD3) is rebooted, and
- the second AAA server (RAD1, RAD2, RAD3) transmits a multicast
message to all the other AAA servers (RAD1, RAD2, RAD3) of the AAA
server system (RADSS), by which it requests the dispatch of updating
messages (UpdtRAD1, UpdtRAD2, UpdtRAD3) and the assignment of
subsets (A1, A2, A3) of the address pool (A) to the first AAA server
(RAD1, RAD2, RAD3).

9. Method in accordance with one of the preceding claims,
characterized in that
- the TCP/IP protocol, the RADIUS protocol or the DIAMETER protocol
is used as the transport protocol for the communication of updating
messages (UpdtRAD1, UpdtRAD2, UpdtRAD3).

AMENDED SHEETS